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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/520,907

07/15/2005

Frances Ann Ellis

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201 7590 06/23/2009  
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EXAMINER

MAEWALL, SNIGDHA

ART UNIT

PAPER NUMBER

1612

MAIL DATE

DELIVERY MODE

06/23/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/520,907	<b>Applicant(s)</b> ELLIS ET AL.	
	<b>Examiner</b> Snigdha Maewall	<b>Art Unit</b> 1612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 11-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/29/05</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### Summary

1. Receipt of IDS filed on 03/29/05 is acknowledged.

### *Restriction/Election*

Applicant's election without traverse of group I claims 1-10 in the reply filed on 04/09/09 is acknowledged.

Applicant's election of  
R1, R2 and R3 are methyl;  
Y is an hydroxyl group; and  
X is a substituted alkyl chain,  
X being a hydroxyl substituted alkyl chain in formula I is acknowledged.

Applicant's election with traverse of specific species 3,3-dimethyl-1,2-butandiol in the reply filed on 04/09/09 is also acknowledged. The traversal is on the ground(s) that there will not be burden for search since the substituents are few are not found persuasive because applicants have not provided evidence to prove that each and every species is obvious variant.

The requirement is still deemed proper and is therefore made FINAL.

Claims 4 and 11-14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention and species there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 04/09/09. It is to be noted that claim 4 does not read on the elected species and since applicants have not provided evidence that species are obvious variants the species

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requirement is deemed proper and final. Further due to search burden and lack of evidence to prove that all the species are obvious variants, the restriction requirement and species requirement is deemed final.

Claims **1-3 and 5-10** are under prosecution on the merits and to the extent they read on the elected species.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 5-6, 8 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Kawasaki (JP 2003137758).

The reference teaches odor masking compositions containing fragrant

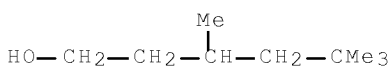
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substances for hair cosmetics see title. The composition is useful for hair dyes and for permanent wave agents, see abstract. The reference discloses 1-hexanol, 3,5,5-trimethyl-, and 2-Heptanol, 3,4,5,6,6-pentamethyl- see CAS registry no. below.

(odor masking compns. containing fragrant substances for hair cosmetics)

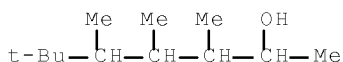
RN 3452-97-9 HCAPLUS

CN 1-Hexanol, 3,5,5-trimethyl- (CA INDEX NAME)



RN 87118-95-4 HCAPLUS

CN 2-Heptanol, 3,4,5,6,6-pentamethyl- (CA INDEX NAME)



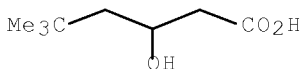
4. Claims 1-3, 5-6, 8 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Ahluwalia et al. (WO-2003/063810).

The reference teaches reduction in hair growth, see title. The reference teaches that unwanted mammalian growth of hair can be reduced by topical application of inhibitor of fatty acid metabolism, see abstract and CAS reg. No. The reference teaches surfactant in the composition, see example on page 13.

RN 149650-17-9 HCAPLUS

CN Hexanoic acid, 3-hydroxy-5,5-dimethyl- (CA INDEX NAME)

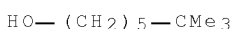
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5. Claims 1-3, 5-6, 8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Birtwistle (EP 371801).

The reference teaches cleaning compositions comprising dialkyl or alkenyl phosphates and alcohol derivatives for skin and hair care see title and abstract.

RN 65769-10-0 HCAPLUS  
CN 1-Heptanol, 6,6-dimethyl- (CA INDEX NAME)



### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3 and 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michael et al. (WO-00/00164, presented in IDS).

Michael teaches a leave-on hair composition which contains a diol, abstract. The reference teaches on page 4, various diols that are included in the composition. The

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reference teaches polar solvent in the composition such as water, see page 3, last Paragraph. The reference teaches surfactants and betaine, see examples.

### Diol

The compositions of the present invention comprise from about 3% to about 30%, preferably from about 4% to about 25%, more preferably from about 5% to about 20%, and most preferably from about 7% to about 15% of a diol. The diol may be a 1, 2- $C_3$ - $C_8$ -alkane diol, a  $C_7$ - $C_{10}$ -alkyl glyceryl-ether, or a mixture thereof.

The 1,2  $C_3$ - $C_8$ -alkane diols are compounds of the formula:



where  $R^1$  is an propyl, butyl, pentyl, or hexyl group.  $R^1$  may be straight chain or branched groups, preferably straight chain. The preferred alkane diols are 1,2 n-pentane diol, 1,2 n-hexane diol, 1,2 n-heptane diol, or mixtures thereof. Most preferred is 1,2 n-hexane diol, where  $R^1$  is n-butyl.

While reference teaches various diols with the claimed formula having butyl instead of tertiary butyl entity in the above formula, the reference does not explicitly teach the claimed 3,3-dimethyl-1,2 butandiol. MPEP states the following with respect to compounds similar in structure:

A *prima facie* case of obviousness may be made when chemical compounds have very close structural similarities and similar utilities. "An obviousness rejection based on similarity in chemical structure and function entails the motivation of one skilled in the art to make a claimed compound, in the expectation that compounds similar in structure will have similar properties." *In re Payne*, 606 F.2d 303, 313, 203 USPQ 245, 254 (CCPA 1979). See *In re Papesch*, 315 F.2d 381, 137 USPQ 43 (CCPA 1963) (discussed in more detail below) and *In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1991) (discussed below and in MPEP § 2144) for an extensive

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review of the case law pertaining to obviousness based on close structural similarity of chemical compounds. See also MPEP § 2144.08, paragraph II.A.4.(c).

As such, in view of *in re Payne*, it would have been obvious to one of ordinary skill in the art at the time of instant invention to utilize 3,3-dimethyl-1,2 butandiol in the primary reference with an expectation to obtain a composition with hair leave-on hair treatment with a reasonable expectation of success.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Snigdha Maewall whose telephone number is (571)-272-6197. The examiner can normally be reached on Monday to Friday; 8:30 a.m. to 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick Krass can be reached on (571) 272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-0580. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO



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800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Snigdha Maewall/

Examiner, Art Unit 1612

/Gollamudi S Kishore/

Primary Examiner, Art Unit 1612